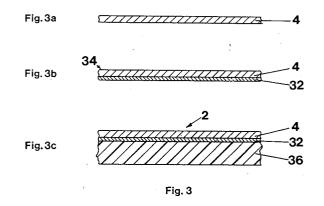
(19)	Ø	Europäisches Patentamt European Patent Office Office européen des brevets	(1)	Publication number: 0452812A3			
(12)		EUROPEAN PATE	INT	APPLICATION			
21 (22)	Application r Date of filing	number: 91105770.1 :: 11.04.91	51) Int. Cl. ⁵ : H05K 1/16, H01C 17/12, C23C 14/50			
(3) (43) (84) (88) (88)	Date of public 23.10.91 Build Designated Comparison of the second	Contracting States: R GB LI NL rred publication of the search report:	(7) (72) (74)	434 Monroe Avenue N. Mankato, MN 56001(US) Representative: Schütz, Peter, DiplIng. et al			
				Dr. Dieter von Bezold DiplIng. Peter Schütz DiplIng. Wolfgang Heusler Brienner Strasse 52 W-8000 München 2(DE)			

A Resistive laminate for printed circuit boards.

(57) A method for making the laminate from a foil, including a platten support step and a sputter etching or cleaning step. The laminate comprises a sputter coated metal foil (4) which is isostatically bonded to an insulative, epoxy resin substrate (36). In a preferred construction a nickel-chrome-aluminiumsilicon resistive layer (32) is applied to a copper foil (4).





European Patent

Office

EUROPEAN SEARCH REPORT

Application Number

EP 91 10 5770

	DOCUMENTS CONSI	DERED TO BE RELEVA	NT		
Category	Citation of document with in of relevant par	dication, where appropriate, sages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 5)	
A	PATENT ABSTRACTS OF 82 (E-889), 15th Fe JP-A-01 293 693 (IB 27-11-1989 * Abstract *	JAPAN, vol. 14, no. oruary 1990; & IDEN CO LTD)	1	H 05 K 1/16 H 01 C 17/12 C 23 C 14/50	
X	IDEM		13		
D,A	72 - column 2, line 10-34; column 2, li lines 34-39; column column 4, lines 28-	D-55; column 1, line 8; column 2, lines nes 53-58; column 3, 4, lines 8-22; 34; column 4, lines nes 58-61; column 6,	1-5,13		
A	GB-A-2 086 943 (SU * Page 1, lines 7-3		1		
				TECHNICAL FIELDS SEARCHED (Int. Cl.5)	
				H 05 K H 01 C	
	The providence of the providence of search	Date of completion of the search		Examiner	
ТН	E HAGUE	12-05-1992		GOOSSENS A.M.J.	
Y:pa do A:te O:no	CATEGORY OF CITED DOCUME rticularly relevant if taken alone rticularly relevant if combined with an cument of the same category chnological background on-written disclosure termediate document	E : earlier pate after the fil D : document c L : document c	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document		



European Patent Office

<u> </u>						
CLAIMS INCURRING FEES						
The preser	t European patent application comprised at the time of filing more than ten claims.					
	All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.					
	Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid,					
	namely claims:					
	No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.					
LA	CK OF UNITY OF INVENTION					
	Division considers that the present European patent application does not comply with the requirement of unity of					
	nd relates to several inventions or groups of inventions.					
amely:						
	See Sheet B.					
	All further search fees have been paid within the fixed time limit. The present European search report has					
	been drawn up for all claims.					
	Only part of the further search fees have been paid within the fixed time limit. The present European search					
	report has been drawn up for those parts of the European patent application which relate to the inventions in					
	respect of which search fees have been paid,					
	namely claims:					
\mathbf{X}	None of the further search fees has been paid within the fixed time limit. The present European search report					
	has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims,					
	1 0 12					
	namely claims: 1-9,10					



EP 91 10 5770 -B-

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

 Claims 1-9,13: Method for making resistive laminate and resistive laminate in itself.
Claims 14-16 : Apparatus for supporting a conductive foil.

3. Claims 10-12 : Other (more general) method for making resistive laminate.